



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,209	01/21/2004	Kia Silverbrook	MPA17US	1357
24011	7590	12/27/2005		
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA			EXAMINER UHLENHAKE, JASON S	
			ART UNIT 2853	PAPER NUMBER

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,209

Applicant(s)

SILVERBROOK ET AL.

Examiner

Jason Uhlenhake

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/3/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2,3,4, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook (U.S. Pat. 6,916,082)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

#### ***Silverbrook discloses:***

- ***regarding claim 1***, at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media (Abstract; Column 2, Lines 44 – 55), a support member supporting the at least two printhead integrated circuits (Column 2,

Lines 55 – 62), and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (Column 2, Lines 33 – 38)

- drive electronics incorporating at least one controller arranged to control the printing operation of a selectable number of the at least two printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 18)

- casing in which the at least one printhead module and the drive electronics are removably mounted (Column 6, Lines 36 – 40)

- **regarding claim 2**, wherein the at least one printhead module comprises one or more groups of two printhead integrated circuits and a single controller is selected for controlling each group of two printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 11)

- **regarding claim 3**, wherein the at least one printhead module comprises one or more groups of four printhead integrated circuits and a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 11)

- **regarding claim 4**, wherein the at least one printhead module comprises one or more groups of eight printhead integrated circuits and a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 11)

- **regarding claim 6**, at least one printhead module formed as a unitary arrangement of at least two printhead integrated circuits (Column 2, Lines 44 – 68)

Art Unit: 2853

- support member, at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member (Column 2, Lines 55 – 62; Column 3, Lines 1 – 15), and an electrical connector (Column 2, Lines 35 – 38)
- the support member has at least one longitudinally extending channel (62 of Figure 1) for carrying the printing fluid for the printhead integrated circuits (Column 3, Lines 1 – 15), plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both , or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (Column 2, Lines 40 – 43; Column 3, Lines 1 – 15)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (U.S. Pat. 6,916,082).

**Silverbrook discloses the claimed invention except for the following:**

- ***regarding claim 5***, the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical

Art Unit: 2853

connector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, for the purpose of improving the quality of printing. *St. Regis Paper Co. v. Bemis Co.*, 93 USPQ 8.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector as taught by Silverbrook. The motivation for doing so would have been to improve the quality of printing.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSU  
December 2, 2005

 12/05  
K. FIGGINS  
PRIMARY EXAMINER